

## REMARKS

Responsive to the Office Action mailed February 14, 2003, the Examiner's comments and cited art have been studied.

### Amendments

Applicant has cancelled claims 16-20. Applicant has added new claims 21-25.

### Drawing Objections

The Office Action objects to the drawings as not showing every feature of the invention specified in the claims. Specifically, the Office Action asserts that the drawings do not show "a key having a first data entry value associated with depressing the key, and the key having one or more additional discrete data entry values associated with deflecting the key in a predetermined direction."<sup>1</sup>

Applicant respectfully traverses the objection. Figures 1-7 and 9 all show such a key, with Figures 5, 6, and 9 showing specific exemplary assignments, i.e., letters and numbers, mapped to various deflections of the keys.

In the paragraph labeled "Additional Remarks," the Office Action "requests the applicant shows integration (i.e. direction, position/zone) of the key 100 operable to be depressed with respect to activation of the other keys (102, 104... 110) from the keypad."<sup>2</sup> Applicant is unsure of the significance and statutory basis of the request, but respectfully points out that reference numbers 102, 104... 110 are not separate keys as the Office Action apparently mischaracterizes them, but are data entry zones of key 100. In one embodiment, the zones are beveled sides of the key 100.<sup>3</sup> For example, pushing key 100 by placing a finger on beveled side 104 and pushing laterally in the direction of zone 108 causes the key to select the data entry state for zone 108. In a more concrete example, the phone 500 of Figure 5 allows entering numbers by depressing the keys in the conventional fashion, and entering letters by deflecting the keys in the direction of the desired letter. Taking the top of Figure 5 as "upwards," pushing upwards on the "3" key produces the letter "E," while pushing left produces the letter "D," right the letter "F," and pushing downwards or toward the bottom of Figure 5 on the "7" key produces "S."<sup>4</sup>

For these reasons, Applicant respectfully requests withdrawal of the objections.

### Claim Objections

Claims 1-20 are objected to as not differing the key 100 "from the keys (104... 110) of the keypad."<sup>5</sup> Applicant respectfully traverses the objections.

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<sup>1</sup> Paper 2, para. 2.

<sup>2</sup> Paper 2, para. 2. (citations omitted).

<sup>3</sup> Spec., para. 10.

<sup>4</sup> Fig. 5; Spec., para. 21.

<sup>5</sup> Paper 2, para. 3.

As shown above, reference numbers 104-110 are not separate keys, but data entry zones of key 100. As shown in Figure 5, for example, the data entry zones are labeled with the value that is entered when the key 100 is pressed in the direction of the zone, e.g., deflecting the "7" key leftwards (relative to Figure 7) enters the letter "P." For these reasons, Applicant respectfully requests withdrawal of the objections.

**Claim Rejections Under 35 U.S.C. § 102**

Claims 1-7, 12-13 and 16-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Vantilla, U.S. Patent No. 6,173,194. Applicant respectfully traverses the rejections.

With respect to claim 1, Vantilla fails to recite all of the elements of Applicant's claimed subject matter.

First, Vantilla does not recite depressing the actuator 23 for data entry of a first value, while deflecting the actuator 23 for data entry of other values. Rather, Vantilla recites pushing the actuator towards the desired character for all values to be entered.<sup>6</sup> When Vantilla recites vertical travel of the actuator 23, the vertical movement is not associated with a data entry value, but is only recited for generating a SEND command or for selecting the character indicated by the previous movement.<sup>7</sup> In contrast, Applicant's claimed subject matter recites depression of the key as associated with a first data entry value.

Second, Vantilla fails to recite the actuator 23 as having a user readable indication of each of the additional data entry values. Vantilla recites the actuator as "surrounded by indicia representing the digits 1-9 and 0, and also the conventional \* and # telephone keys."<sup>8</sup> These indicia are not part of the actuator, but are formed in the housing of the telephone 10, or are displayed in the display 20.<sup>9</sup> In contrast Claim 1 recites "the key having a user readable indication" of each value.

For these reasons, Applicant respectfully requests withdrawal of the rejections.

Claims 2-11 depend from allowable claim 1 and are therefore also allowable. For this reason, Applicant respectfully requests withdrawal of the rejections.

With respect to claims 2 and 13, Vantilla recites the conventional association of the digit 2 with the letters A, B, and C, as on a conventional telephone keypad.<sup>10</sup> As on a conventional telephone keypad, the individual letters are not entered, but the digits, so that a user could dial 1-800-FLOWERS by dialing 1-800-3569377. Vantilla nowhere recites anything but numbers as the actual data entry values. For these additional reasons, Applicant respectfully requests withdrawal of the rejections.

With respect to claim 4, Vantilla fails to recite association of data values with an adjustable zone around a periphery of the key. Vantilla nowhere recites adjustable zones. Rather, Vantilla recites an actuator 23 with a number of degrees of freedom, and fixed

<sup>6</sup> Col. 3, lines 23-

<sup>7</sup> Col. 3, lines 55-64; Col. 6, lines 1-4, 10-13, 23-25, and 33.35.

<sup>8</sup> Col. 3, lines 23-25.

<sup>9</sup> Figs. 1A and 4A; Col. 5, lines 59-63.

<sup>10</sup> Col. 3, lines 36-41.

indicia surrounding the actuator 23, where pushing the actuator towards one of the indicia selects that one of the indicia.<sup>11</sup> Because Vantilla is concerned with dialing phone numbers, the standard twelve buttons of a telephone keypad are necessary and sufficient for Vantilla's actuator to support; thus, there is no incentive to adjust the data entry indicia for other numbers of indicia. Even where Vantilla recites a sphere as the actuator, Vantilla recites a fixed matrix of indicia.<sup>12</sup> In contrast, Applicant's apparatus allows a user to reconfigure the key and adjust the zones around the key, to provide for different numbers or arrangements of data entry values. For these additional reasons, Applicant respectfully requests withdrawal of the rejections.

With respect to claim 7, the Office Action asserts that "Vantilla discloses an apparatus, wherein the number of predetermined zones or directions is user selectable (col. 3, lines 55-67)."<sup>13</sup> The cited passage nowhere recites a user selectable number of zones, but recites the effect of depression of the actuator 23 and the use of an actuator which can be rotated around an axis of rotation AR. There is nothing in the cited passage or elsewhere in Vantilla that recites a user-selectable number of zones around the actuator 23. For these additional reasons, Applicant respectfully requests withdrawal of the rejection.

#### **Claim Rejections Under 35 U.S.C. § 103**

Claims 8-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vantilla, U.S. Patent No. 6,173,194. Applicant respectfully traverses the rejections.

Claims 8-11 depart from allowable claim 1 and are therefore also allowable. For these reasons, Applicant respectfully requests withdrawal of the rejections.

Claim 14 rejected under 35 U.S.C. § 103(a) as being unpatentable over Vantilla, U.S. Patent No. 6,173,194. Applicant respectfully traverses the rejection.

Claim 14 depends from allowable claim 8 and is therefore also allowable. For this reason, Applicant respectfully requests withdrawal of the rejection.

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Vantilla, U.S. Patent No. 6,173,194, in view of Dodd, U.S. Patent No. 6,127,949. Applicant respectfully traverses the rejection.

Claim 15 depends from allowable claim 8 and is therefore also allowable. For this reason, Applicant respectfully requests withdrawal of the rejection.

#### **New Claims**

New claims 21-25 are directed to a technique for providing a soft key in a system having a hardware key with more than two states. Vantilla fails to teach or suggest such a technique, nowhere using soft keys to configure the data zones or data values for the hardware key. Therefore Applicant respectfully submits that new claims 21-25 are allowable.

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<sup>11</sup> Col. 3, lines 23-25.

<sup>12</sup> Figs. 4D and 5; Col. 6, lines 25-38.

<sup>13</sup> Paper 2, para. 5.

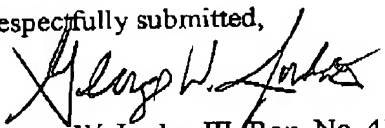
## CONCLUSION

The prior art made of record, but not specifically cited, is not believed to disclose any significant information that is not sufficiently discussed in this Response.

It is respectfully submitted that all issues and rejections have been adequately addressed and that all claims as amended and pending following entry of this Response are now allowable and that the case should be advanced to issuance.

If the Examiner has any questions or wishes to discuss the claims as amended, the Examiner is encouraged to call the undersigned or David R. Clonts at the telephone number indicated below.

Respectfully submitted,

  
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